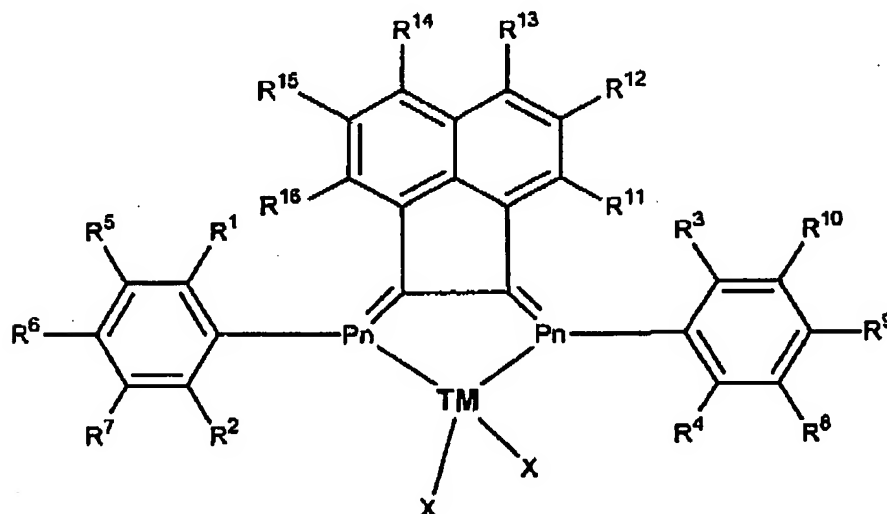


Listing of the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A composition comprising the product of combining, in the presence of a free radical initiator, at least one ~~catalyst polymerization olefin~~ monomer, and a catalyst precursor compound wherein the catalyst precursor compound is represented by the formula:

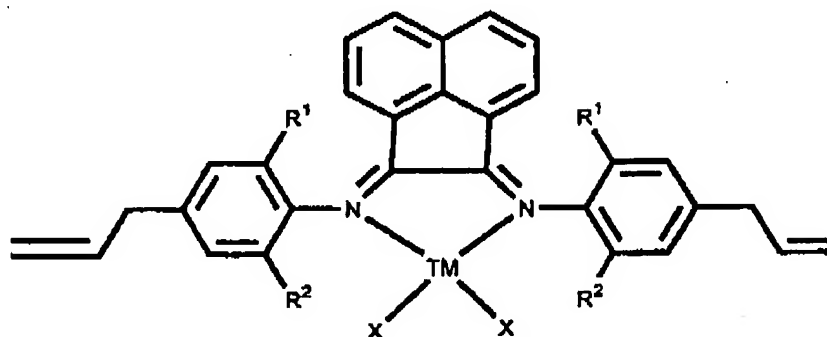


wherein

- (a) R¹-R¹⁶ are hydrogen or hydrocarbyl radicals provided that at least one R¹-R¹⁰ or R¹¹-R¹⁶ ~~is capable of polymerization functions to make the catalyst precursor compound polymerizable~~ by a free-radical-initiated polymerization reaction;
- (b) TM is a ~~Group 4-11~~ Group-9-11 transition metal, except Ni;
- (c) X represents an abstractable ligand; and

(d) Pn represents a ~~Group-15 element~~ nitrogen.

2. (currently amended) The composition of Claim 1 wherein the catalyst precursor compound ~~wherein the catalyst precursor compound~~ is represented by the formula:



wherein

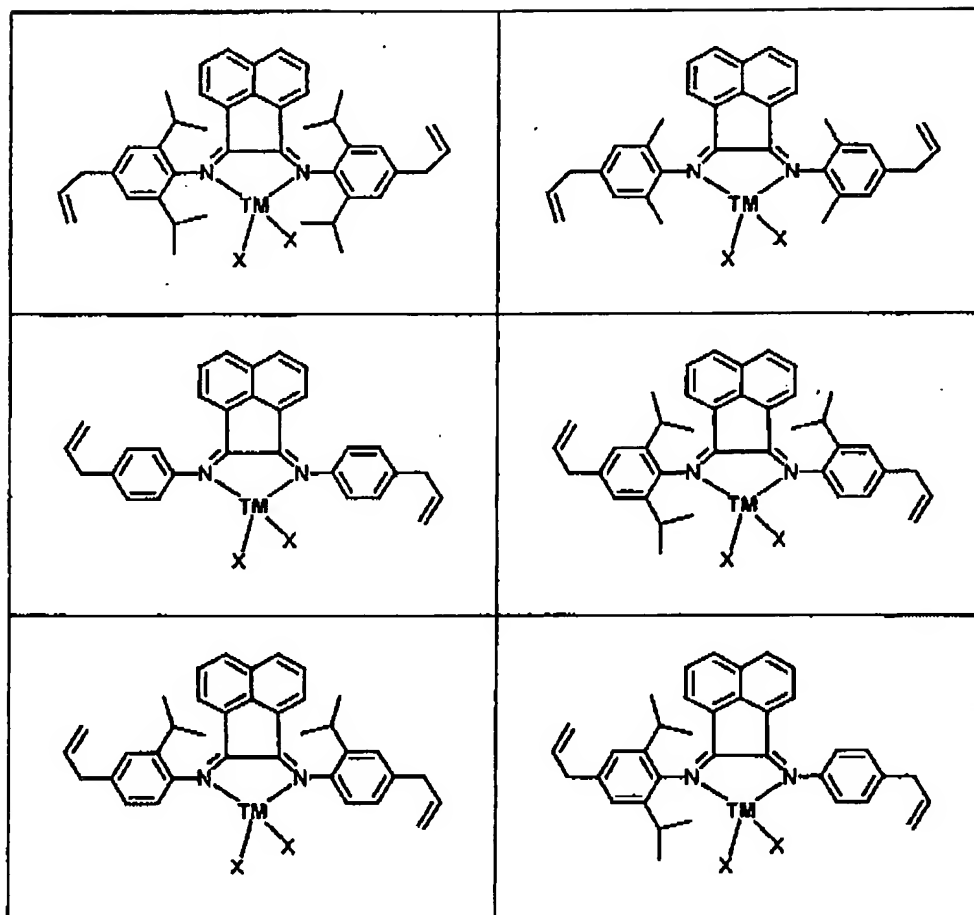
- (a) each X is independently selected from abstractable ligands;
- (b) R^1 and R^2 are independently hydrogen or hydrocarbyl groups;
- and
- (c) TM is a ~~Group-4-11~~ Group-9-11 metal, except Ni.

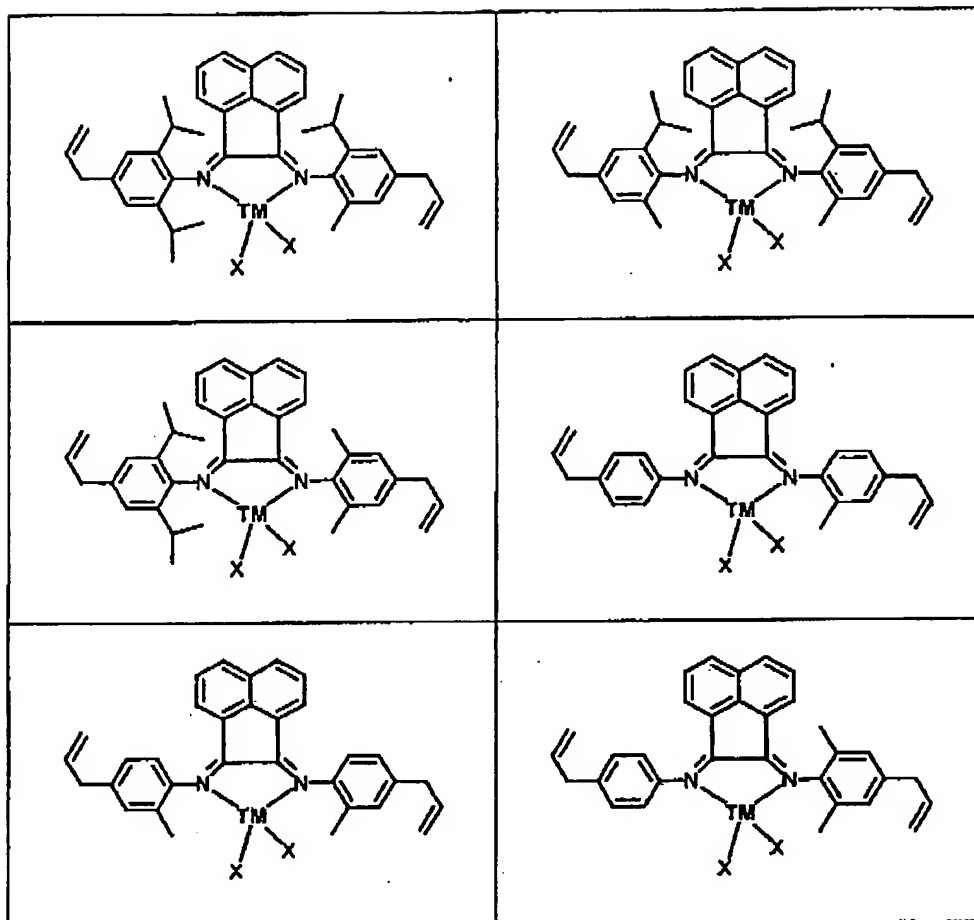
3. (currently amended) The composition of Claim 2 wherein each ~~R^1 and R^2~~ R^1 and R^2 are independently selected from the group consisting of hydrogen [or] and a ~~C1-C50~~ C_1-C_{30} hydrocarbyl group.

4. (currently amended) The composition of Claim 3 wherein each ~~R^1 and R^2~~ R^1 and R^2 are independently selected from the group consisting of hydrogen [or] and a ~~C1-C30~~ C_1-C_{30} hydrocarbyl group.

5. (currently amended) The composition of Claim 4 wherein each ~~R¹ and R²~~ R¹ and R² are independently selected from the group consisting of hydrogen [or] and a C₁-C₁₀ C₁-C₁₀ hydrocarbyl group.
6. (cancelled)
7. (original) The composition of Claim 6 wherein TM is Co.
8. (currently amended) The composition of Claim 1 wherein the two abstractable ligands are hydride radicals; hydrocarbyl radicals; or hydrocarbyl-substituted, organometalloid radicals.
9. (currently amended) The composition of Claim 8 wherein the two abstractable ligands join to form a 3-to-40-atom metallacycle ring.
10. (currently amended) The composition of ~~Claim 8~~ Claim 1, wherein the two abstractable ligands are halogen, alkoxide, aryloxy, amide, or phosphide radicals.
11. (currently amended) The composition of ~~Claim 10~~ Claim 1, wherein the two abstractable ligands are independently chloride, bromide, iodide, methyl, ethyl, propyl, butyl, pentyl, hexyl, heptyl, octyl, nonyl, decyl, undecyl, dodecyl, tridecyl, tetradecyl, pentadecyl, hexadecyl, heptadecyl, octadecyl, nonadecyl, eicosyl, heneicosyl, docosyl, tricosyl, tetracosyl, pentacosyl, hexacosyl, heptacosyl, octacosyl, nonacosyl, triacontyl, hydride, phenyl, benzyl, phenethyl, tolyl, methoxy, ethoxy, propoxy, butoxy, dimethylamino, diethylamino, methylethylamino, phenoxy, benzoxy, allyl, 1,1-dimethyl allyl, 2-carboxymethyl allyl, acetylacetonate, 1,1,1,5,5,5-hexa-fluoroacetylacetonate, 1,1,1-trifluoro-acetylacetonate, or 1,1,1-trifluoro-5,5-dimethylacetylacetonate radicals.
12. (original) The composition of Claim 11 wherein at least one abstractable ligand is chloride or bromide.

13. (withdrawn) A composition comprising the reaction product of the composition of Claim 1 and an activator.
14. (withdrawn) The composition of Claim 13 wherein the activator is selected from alumoxanes, aluminum alkyls, alkyl aluminum halides, alkylaluminum alkoxides, discrete ionic activators, and Lewis acid activators.
15. (withdrawn) The composition of Claim 14 wherein the activator is selected from methylalumoxane, modified methylalumoxane, ethylalumoxane, trimethyl aluminum, triethyl aluminum, triisopropyl aluminum, diethyl aluminum chloride, alkylaluminum alkoxides, ammonium borate salts, phosphonium borate salts, triphenyl carbenium borate salts, ammonium aluminate salts, phosphonium aluminate salts, triphenyl carbenium aluminate salts, trisarylborane acids, and polyhalogenated heteroborane anions.
16. (currently amended) The composition of Claim 1 wherein the catalyst precursor compound is represented by the formulae:





wherein

- (a) ~~each X is independently selected from abstractable ligands;~~
 and
 (b) ~~TM is a Group 4-11 Group 9-11, except Ni.~~

17. (cancelled)

18. (original) The composition of Claim 17 wherein TM is Co.

19. (withdrawn) An olefin polymerization method comprising the step of contacting an olefin and the composition of Claim 1.